POSITION DESCRIPTION

1. Agency PDCN 90041C00

2. Reason for Submission	3. Service	4. Empl Office Location	5. Duty Station	6. OPM Cert #
☐ Redescription ☒ New	☐ HQ ☒ Field			

2. Reason for Submission
☐ Redescription ☒ New
☐ Reestablishment ☐ Other
Explanation (Show Positions Replaced)

7. Fair Labor Standards Act
Not Applicable

8. Financial Statements Required
☐ Exec Pers Financial Disclosure
☐ Employment & Financial Interests

9. Subject to IA Action
☐ Yes ☐ No

10. Position Status
☐ Competitive
☒ Excepted (32 USC 709)
☐ SES (Gen)
☐ SES (CR)

11. Position is
☐ Supervisory
☐ Managerial
☒ Neither

12. Sensitivity
☐ Non-Sensitive
☐ Noncritical Sens
☐ Critical Sens
☐ Special Sens

13. Competitive Level

14. Agency Use
OFFICER

15. Classified/Graded by
☐ a. US Office of Pers Mgt ☒ b. Dept, Agency or Establishment ☐ c. Second Level Review ☐ d. First Level Review

Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
Information Technology Specialist (SYSADMIN)	GS	2210	12	djs	16 Jan 04

16. Organizational Title (If different from official title)
Senior Systems Administrator

17. Name of Employee (optional)

18. Dept/Agency/Establishment - National Guard Bureau

a. First Subdivision -

b. Second Subdivision -

c. Third Subdivision -

d. Fourth Subdivision -

e. Fifth Subdivision -

19. Employee Review. *This is an accurate description of the major duties and responsibilities of my position.*

Employee Signature /Date (optional)

20. Supervisory Certification. *I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes related to appointment and payment of public funds. False or misleading statements may constitute violations of such statutes or their implementing regulations.*

a. Typed Name and Title of Immediate Supervisor

b. Typed Name and Title of Higher-Level Supervisor/Manager (optional)

Signature   Date

Signature   Date

21. Classification/Job Grading Certification: *I certify this position has been classified/graded as required by Title 5 USC, in conformance with USOPM published standards or, if no published standards apply directly, consistently with the most applicable standards.*

Typed Name and Title of Official Taking Action

DEBRA J. SPILMAN
Human Resources Specialist (Classification)

Signature
//signed//

Date
16 Jan 04

22. Standards Used in Classifying/Grading Position
US OPM JFS for Administrative Work in the Information Technology Group, GS-2200, "Information Technology Specialist, GS-2210," May 2001.

Information For Employees. *The standards and information on their application are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or OPM. Information on classification/job grading appeals is available from the personnel office.*

23. Position Review	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date
a. Employee (Opt)										
b. Supervisor										
c. Classifier										

24. Remarks:
Released from NGB-HRC, CRA 04-1001, dated 16 Jan 04
NDS PD# N0363

25. Description of Major Duties and Responsibilities (SEE ATTACHED)

25.

a. <u>INTRODUCTION</u>

This position is located in an information management organization. The purpose of the position is to serve as the technical expert and project leader for information technology (IT) systems administration. The systems administered involve multiple computers running multiple operating systems. The incumbent is responsible for the planning and coordinating the installation, testing, system security configuration and monitoring, operation, troubleshooting and maintenance of all server hardware and software.

This position requires military membership. It is designated for an Officer incumbent only. In accordance with DA Pamphlet 611-21, DA Pamphlet 600-3 and AFMAN 36-2105, the incumbent provides guidance to subordinates and team leadership to non-dual status (NDS) and dual status (DS) employees. The incumbent plans, organizes, manages, and performs duties necessary to accomplish command, control, communications and computers (C4) functions in support of programs essential to state information management daily operations, training, and readiness missions. Fosters an environment conducive to teamwork among service providers and customers in meeting state C4 requirements.

b. <u>DUTIES AND RESPONSIBILITIES</u>

--Serves as project leader responsible for developing, assigning, and coordinating duties and projects for systems administrators. The project members are specifically assigned to one or more of the multiple system platforms located throughout the state.

--Develops, modifies, and tests overall system backup and recovery strategies for all systems.

--Serves as the technical expert and focal point for installation, configuration and testing of hardware and software associated with multiple operating systems and computer platforms. Provides technical assistance and analysis to other IT personnel involved in system design, programming, database design, and adapting commercially available software. Determines equipment requirements, communications, and interfaces with other systems. Evaluates machine usage based on current usage patterns and develops plans for the acquisition of hardware and software needed to support future IT requirements.

--Serves as the senior systems administrator responsible for planning, coordinating, modifying, implementing, and troubleshooting to support customer needs. Work pertains to the administration of all systems including ensuring the efficient integration between systems as well as compatibility with local area network (LAN) and wide area network (WAN) infrastructure.

--Analyzes, evaluates, and recommends hardware/software changes to various computer systems. Considers factors such as compatibility with standard systems, conversion or implementation costs, and impact on existing equipment.

--Develops guidelines, standard operating procedures (SOPs), bulletins and flyers concerning the operation/use of C4 systems, services, and activities. Provides interpretations of higher authority regulations and guidance concerning IT system activities/services and coordinates with internal departments and external agencies concerning the resolution of problem areas encountered. Advises the information management staff on issues pertaining to operating systems and hardware status.

--Plans and schedules the installation of new or modified hardware, operating systems, and software applications. Directs testing of vendor-provided software. Develops, documents, coordinates, updates and validates the state Continuity of Operation Plan (COOP) procedures for system disaster recovery.

--Implements operating system releases and maintains the operational status of systems.

--Performs security management in accordance with NGB regulations and state policies. Develops and analyzes local policies regarding system access, network rights, and physical access to systems and equipment.

--Develops policy for all systems storage requirements throughout the state. Designs and modifies the storage structure and correlation between systems. Modifies system parameters on multiple operating systems, integrating the use of Storage Area Networks (SAN), to achieve maximum system efficiency. Analyzes system operations to identify bottlenecks and takes action to resolve problems and ensure optimal performance and consistency.

--Troubleshoots problems and implements changes on multiple computer platforms. Diagnose system failures to isolate source of problems between equipment, system software, and application programs. When problems are found, modifies code, devises fixes, documents problems and advises responsible vendor or other outside party. Interacts with peers and vendors to resolve hardware and software problems and reports unresolved problems to the appropriate party.

--Coordinates with specialists and managers at higher levels to obtain information for interfacing with systems at those levels and to facilitate the acquisition and exchange of information technology. Serves as the organization authoritative expert at meetings and seminars designed to arrive at solutions for mutual systems administration problems.

--Performs other duties as assigned.

Factor 1 - Knowledge Required by the Position:

--Knowledge of a variety of operating systems (i.e., Windows NT, Windows 2000, Windows XP, Unix, etc.) on desktop and server assets in order to administer user accounts and perform backup operations.

--Knowledge of project management techniques and tools sufficient to provide expert guidance on the implementation of emerging technologies to diverse dispersed locations throughout the state.

--Ability to lead team members who are assigned to one or more locations in the state.

--Knowledge of, and skill in applying the principles and methods for planning, updating, and integrating information system components, including software, controlling future releases, and documenting information and physical characteristics of an information system or product.

--Skill in troubleshooting problems in the data center and implementing changes on multifaceted and interdependent computer platforms.

--Skill in programming sufficient to modify application code, devise software patches or workarounds, document problems and advise the responsible vendor or other outside party on support issues.

--Skill in analyzing requests for new and modified applications with expert ability in system design, programming, hardware selection and adapting commercially available software.

--Knowledge of and skill in applying storage management practices and assignment of resources and file management techniques.

--Skill in using performance tuning tools and techniques to optimize systems functionality in order to meet installation systems requirements.

--Knowledge of the techniques and practices to implement fault tolerance on a diverse number of complex systems and applications in order to optimize functionality and service to the customer base.

--Knowledge of system diagnostic tools and structured techniques for the recovery of failed systems and data access.

--Knowledge of analysis and design techniques to develop system software modifications, systems administration policy and procedures for use across the organization.

--Knowledge of overall system architecture along with the systems being administered to integrate information systems components in order to install and maintain software and hardware configurations.

--Knowledge of state-of-art system software technology and related computer equipment to perform studies and evaluate whether changes in the system would be advisable.

--Knowledge of a wide range of IT standards, principles, concepts, methods, policies, and authorized approaches.

--Knowledge of agency applications, operating systems and components, protocols, and the hardware and software used throughout the state in order to conduct system administration functions.

--Knowledge of agency security principles and methods.

Factor 2 - Supervisory Controls:

Supervisor outlines overall objectives and resources available. The incumbent, in conjunction with the supervisor, determines timeframes, scope of assignment and possible stages and approaches necessary to successfully accomplish the mission. The incumbent has the responsibility for planning and carrying out projects and for coordinating with experts both within and outside the organization. As the state's leading technical authority in their area of expertise, the incumbent frequently interprets regulations on his/her own initiative and applies new methods to resolve the most complex, controversial and unprecedented problems, keeping the supervisor informed of potentially controversial matters. Completed work is reviewed for soundness of overall approach, effectiveness in meeting objectives and feasibility of recommendations. Methods used are not normally reviewed.

Factor 3 - Guidelines:

Guidelines include general agency policy, command and directorate regulations, policies, and procedures with objectives being rather broadly defined. The continued advancement and development of software, hardware, and NGB/State/Installation long-range planning requires perception of trends in overall automated data processing (ADP) requirements and technology. A high degree of judgment is required in areas of technologic advances and innovative techniques in specialization areas where new and improved methods are required and there are few or no precedents to follow. The incumbent makes adaptations in dealing with problems such as limited resources and hardware constraints/limitations. Guidelines must be refined to resolve problems with NGB standard systems.

Factor 4 - Complexity:

Work consists of managing changes to the systems environment, which involves a depth of analysis in the system's software and projects, and may entail significant departures from established practices. In the planning, design, and development of improvements, consideration must be given to diverse computer configurations used within the state. Due to the complexity of current computer systems and the requirements for the computer systems to interface with each other, many factors such as communication protocols and character sets must be carefully examined and compensated for. The extremely complex environment frequently require departure from past approaches and extension of techniques or the development of innovative practices to meet the major objectives without degrading system performance.

Assignments involve the accomplishment of complete system studies requiring in-depth analysis of a myriad of complex system administration factors and many different and unrelated processes and methods. Continuing changes in national business requirements and the rapidly changing IT environment make the work complex. The incumbent must remain updated on changing technology and continuously evaluate changing future organizational information needs. Exceptional technical difficulty exists requiring the incumbent to develop methodologies for multiple operating system performance efficiencies, design structures for new operating systems and modify multiple existing functional systems involving various operating systems and hardware platforms.

Factor 5 - Scope and Effect:

The work involves research, investigation, and definition of computer hardware and software configurations, specifications, and problems as relates to the command unique ADP requirements and Army standard systems, as they apply. The incumbent serves as an authoritative source of state-of-the-art equipment/systems in the area of systems administration and is an advisor to command management, and to NGB in matters of computer system administration for the purpose of maintaining efficient and effective support to the overall mission. The work involves troubleshooting, developing and refining services and consulting with program specialists in developing new services and/or enhancing existing services that expand current information dissemination capabilities. The work also involves planning, coordinating, and conducting/directing in-depth studies of installation system administration needs, services/activities, and developing strategies and plans to satisfy those needs leading to the implementation of new/enhanced systems/sites, etc.

The work facilitates the efficient delivery of program information and exchange of information between clients and organizations (i.e., within the installation, divisions, states, NGB, other agencies, and the private sector). The work also affects a wide range of agency activities or activities of other organizations.

Factor 6 - Personal Contacts &
Factor 7 - Purpose of Contacts:

In addition to contacts within the agency, contacts take place with computer personnel and with equipment or system software vendors in moderately unstructured settings.

The purpose of the contacts is to obtain information and training on latest features or techniques relative to the state-of-the-art systems administration. Incumbent must influence and persuade others to cooperate in meeting objectives and resolving problems when there are difficulties securing cooperation.

Factor 8 - Physical Demands:

The work is sedentary. No special physical demands are required to perform the work.

Factor 9 - Work Environment:

The work is performed in a typical office setting. Special safety precautions are not required.

EVALUATION STATEMENT

A. <u>Title, Series and Grade</u>: Information Technology Specialist, (SYSADMIN), GS-2210-12.

B. <u>Reference</u>: USOPM Job Family Position Classification Standard for Administrative Work in the Information Technology Group, GS-2200, "Information Technology Management Series, GS-2210, dated May 2001.

C. <u>Background</u>: Over the past several years, technology has changed so rapidly in the field of information technology (IT), positions developed only a few years ago are outdated. With the abolishment of the Computer Specialist Series, GS-0334 and the implementation of the new occupational series of Information Technology Management, GS-2210, a review of all Computer Specialist position descriptions was conducted. At this same time, it was also recognized that these technological changes have impacted more than just the Computer Specialist positions located in the various C4 organizations throughout the state. As a result, all positions in the Army IT organizations were reviewed and updated. During the evaluation process of these new position descriptions, a decision was made by the National Guard leadership to merge many of the headquarters functions performed by both the Air and Army National Guard into the Joint Forces Headquarters (State). The information management functions were some of the functions that were affected. New position descriptions were developed to comply with this joint operations concept. To accommodate those states that do not merge all of the information management positions into the J-6, an attempt was made to make these new PDs as component and organizationally generic as possible. This position is one of these new PDs.

Special Note: This position is credited with factor levels that would not typically be found in a state-level position description – Factor Levels 3-4, 4-5 and 5-4. Due to the constantly changing technology associated with information technology management; the unique nature of the National Guard and its relationship with state and homeland defense agencies along with the level of support the NGB-J6 leadership requires from the senior specialists in each IT specialty area, these levels are appropriate for this position. As the technical expert in the IT area this position specializes in, there should only be one incumbent assigned to this position per organization.

D. <u>Series, Title, and Grade Determination</u>:

1. <u>Series</u>: Work in the GS-2210, Information Technology series refers to systems and services used in the automated acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, assurance, or reception of information. Information technology includes computers, network components, peripheral equipment, software, hardware, services, and related resources. This position is the state's technical expert in the area of system administration. The incumbent administers multiple computers and multiple operating systems. The information technology work defines the primary skills and knowledge

needed to perform this work in this directorate. Therefore the GS-2210 series is assigned.

    2. <u>Title</u>: The basic title for positions classified to the GS-2210 series is Information Technology Specialist. A parenthetical title of "SYSADMIN" is added to denote specialization in work involving the planning and coordinating of the installation, testing, operation, troubleshooting and maintenance of hardware and software systems.

    3. <u>Grade</u>: See the attached Factor Evaluation table and the Factor Level Analysis.

E. <u>Conclusion</u>: Information Technology Specialist (SYSADMIN), GS-2210-12.

Classifier: Debra J. Spilman, NGB-HRCA   Date: 16 Jan 04

**FACTOR EVALUATION SYSTEM
POSITION EVALUATION STATEMENT**

FACTOR	FL	PTS	REMARKS
1. Knowledge Required by the Position	1-7	1250	See Analysis Below
2. Supervisory Controls	2-4	450	" "
3. Guidelines	3-4	450	" "
4. Complexity	4-5	325	" "
5. Scope And Effect	5-4	225	" "
6. Personal Contacts & 7. Purpose Of Contacts	3c	180	" "
8. Physical Demands	8-1	5	" "
9. Work Environment	9-1	5	" "
TOTAL POINTS ASSIGNED: 2890			**GRADE: GS-12**

Factor 1 - Knowledge Required by the Position: Level 1-7   1250 Points

This position exceeds level 1-6. Assignments at Level 1-6 are routine and recurring in the software application area requiring a much lower level of knowledge and skill. An example of work requiring Level 1-6 knowledge and skill includes assisting in identifying and specifying business requirements for new and enhanced system.

This position is the senior system administrator with the incumbent being regarded as the state's leading technical authority in the area of system administration. The incumbent serves as a project leader for systems administration projects, develops system backup and recovery strategies, ensures the installation of new systems and system changes are installed and configured to meet local state needs, integrates the use of Storage Area Networks (SAN) to achieve maximum system efficiency, analyzes system operations to identify bottlenecks and take corrective action to ensure optimal performance and consistency. These duties require the Level 1-7 knowledge and skill of system administration principles and methods for integrating information systems components, performance tuning tools and techniques and systems diagnostic tools to perform the type of work described on page 38 of the standard. This position fully meets the requirements for Level 1-7.

Level 1-8 is defined as mastery level. To support this level requires advanced IT concepts, advising on critical IT issues and previously unsolvable problems. This level of knowledge is typically found at the agency level and not at state level and thus is not appropriate for this position.

Factor 2 - Supervisory Controls: Level 2-4   450 Points

Level 2-3 is exceeded by the position. At this level, the supervisor outlines or discusses possible problem areas and defines objectives, plans, priorities, and deadlines. The employee independently plans and carries out the assignments in conformance with accepted policies and practices and adheres to instructions, policies, and guidelines in

exercising judgment to resolve commonly encountered work problems and deviations. Controversial information or findings are brought to the attention of the supervisor for direction. The incumbent of this position is regarded as the state's leading technical authority in systems administration and as such clearly operates with a greater level of independence than is typical of Level 2-3.

The supervisor of this position outlines overall objectives and resources available. Together with the supervisor, the incumbent determines timeframes, scope of assignment and possible approaches to use. The incumbent frequently interprets regulations on his/her own initiative and applies new methods to resolve complex, controversial and unprecedented problems, keeping the supervisor informed of potentially controversial matters. Completed work is reviewed for soundness of overall approach, effectiveness in meeting objectives and feasibility of recommendations. Methods used are not normally reviewed. This is a direct match to Level 2-4 where the supervisor outlines overall objectives and available resources. The employee at Level 2-4 determines the approach to be taken, and the methods to be used and frequently interprets regulations on their own initiative, applies new methods to resolve complex and/or intricate, controversial, or unprecedented issues and problems, and resolves most of the conflicts that arise. Also at Level 2-4 completed work is reviewed for soundness of overall approach, effectiveness in meeting requirements or producing expected results, feasibility of recommendations, and adherence to requirements.

The position does not meet level 2-5 where the supervisor provides administrative and policy direction in terms of broadly defined missions or functions of the agency. The incumbent of the position does not have responsibility for a significant agency or equivalent level IT program or function; does not interpret policies promulgated by authorities senior to the immediate supervisor and determine the effects on the program needs; and is not considered a technical authority.

Factor 3 - Guidelines: Level 3-4   450 Points

Level 3-4 has been determined to fit the work of this position. Although Factor Level 3-4 is not frequently applicable to positions located at state-level, it has been determined by leadership personnel of the National Guard Bureau Human Resources program to be applicable in certain instances as evidenced by it being credited in standardized position descriptions which they have certified as being properly classified. The level of guidelines used in those position descriptions does not vary significantly from those used by this position. In addition, this level has historically been credited in National Guard positions for those specialists in the states that area recognized at the technical expert for the state in a specific information technology functional specialty. This position is considered the technical authority in his/her IT specialty, thus based on this historical interpretation; Level 3-4 should also be appropriate for this position.

Technology is constantly changing in the field of Information Technology and these changes are most often developed to meet the needs of private industry or the major DoD components (i.e., Department of Army, Department of the Air Force, Department of

Navy). As a result, the available guidelines rarely address specific issues/problems that occur at the state-level in the National Guard information management arena, thus the senior Information Technology Specialist (SYSADMIN) in the state is responsible for interpreting and modifying these guidelines to fit the specific unique needs of the state. This often results in the development of new methods and procedures that may be adopted for use throughout the National Guard.

The significant lack of applicable guidelines along with the resulting level of judgment and initiative required in deviating from the established methods fully meets that required at Level 3-4.

Factor 4 - Complexity: Level 4-5   325 Points

Although Factor Level 4-5 is not frequently applicable to positions located at the state-level, it has been credited for several NGB standardized position descriptions for National Guard positions in the Information Technology field. The duties of this position do not vary significantly from the IT duties of the positions historically credited with this level in the National Guard, thus based on this historical interpretation, Level 4-5 would also be appropriate for this position.

Level 4-5 requires the application of different and unrelated processes and methods to a broad range of IT activities or to the in-depth analysis of IT issues. This level is expected where the work is to establish, implement, and interpret the requirements of agency compliance with higher-level policy directives, where recommendations would me made and implemented throughout the agency. The Functional Manager and Officer of Primary Responsibility rely heavily on the Information Management Council (IMC) to stay up-to-date on the latest changes in the Information Technology field. The IMC is relied upon to test and recommend hardware, software and infrastructure changes that ultimately impact the National Guard information technology program policies and procedures. Due to the limited size of its membership, the IMC relies heavily on the senior Information Technology Specialists in the states to research and gather the applicable information and provide expert analysis on these constantly changing industry trends.

Thus, as the senior Information Technology Specialist (SYSADMIN) in the state, this position fully meets the intent of Factor Level 4-5.

Factor 5 - Scope and Effect: Level 5-4   225 Points

Although Factor Level 5-4 is not frequently applicable to positions located at state-level, it has been determined by leadership personnel of the National Guard Bureau Human Resources program to be applicable in certain instances as evidenced by it being credited in standardized position descriptions which they have certified as being properly classified. The scope and effect of those position descriptions do not vary significantly from that of this position. In addition, this level has historically been credited in National Guard positions for those specialists in the states that area

recognized at the technical expert for the state in a specific information technology functional specialty. This position is considered the technical authority in his/her IT specialty, thus based on this historical interpretation; Level 5-4 should also be appropriate for this position.

The Functional Manager and Office of Primary Responsibility (OPR) rely heavily on the Information Management Council (IMC) to stay up-to-date on the latest changes in the Information Technology field. The IMC is relied upon to test and recommend hardware, software and infrastructure changes that ultimately impact the National Guard information technology program policies and procedures. Due to the limited size of its membership, the IMC relies heavily on the senior Information Technology Specialists in the states to research and gather the applicable information and provide expert analysis on these constantly changing industry trends.

Thus, as a senior Information Technology Specialist (SYSADMIN) in the state, this position fully meets the intent of Factor Level 5-4.

<u>Factor 6 - Personal Contacts &</u>
<u>Factor 7 - Purpose of Contacts</u>:   Matrix 3c   180 points

Contacts for this position exceed those typical for Level 2. At Level 2, contacts are normally with employees within the same agency, both inside and outside the immediate organization. Contacts with the general public at Level 2 occur in a moderately structured setting (i.e., these contacts would be on a routine basis, the exact purpose of the contact as well as the role and authority of each participant would be fairly clear from the beginning.

Contacts for this position include personnel both within (i.e., users and other IT personnel) and outside the National Guard (i.e. hardware and software vendors). Contacts often occur in an unstructured setting. This matches personal contacts described in the standard for Level 3, where contacts are with individuals or groups from outside the employing agency and occur in a moderately unstructured setting (not routine, and the role of all parties is identified during the contact).

Level 4 is not met by the position as contacts do not routinely involve high-ranking officials outside the agency, at national or international levels in highly unstructured settings.

The purpose of contacts for this position exceed Level B which includes planning, coordinating and resolving operating problems by influencing or motivating individuals or groups who are working toward mutual goals and who have basically cooperative attitudes.

In this position, the purpose of the contacts is to obtain information and training on latest features or techniques relative to the state-of-the-art application software development. Incumbent must influence and persuade others to cooperate in meeting objectives and

resolving problems when there are difficulties securing cooperation. This is a direct match to Level C, where the persons contacted are reluctant to accept the employee's recommendations due to such issues as organizational conflict, competing objectives or resource problems. The issues addressed are not of the level described at Level D. NGB level staff members would more often encounter level D issues.

<u>Factor 8 - Physical Demands</u>:   Level 8-1   5 points

While some lifting is required, the work is primarily sedentary requiring no special physical effort. This is a direct match to Level 8-1.

<u>Factor 9 - Work Environment</u>:   Level 9-1   5 points

Work is performed in an office setting. No special safety precautions required. This is a direct match to Level 9-1.

FINAL CLASSIFICATION: Information Management Specialist (SYSADMIN), GS-2210-12

Classifier: Debra J. Spilman, NGB-HRCA   Date: 16 Jan 04